

IN THE SPECIFICATION

Please replace paragraph [13] with the following paragraph:

[13] As shown in Figure 2, the valve 30 is in the air conditioning position. Refrigerant passes serially from the compressor 22 to outdoor heat exchanger 24, eventually to the indoor heat exchanger 28, then returning to the compressor 22 through the line 27. As can be seen in Figure 2, the valve assembly 36 is in the air conditioning position. In this position, the line 33 downstream of the outdoor heat exchanger 24 communicates the refrigerant to a line 40 that passes to the economizer heat exchanger 34. Further, tap 37 is tapped from this line 40 and passed through the economizer expansion device 32, and through the economizer heat exchanger 34. The line 35 downstream of the main flow of the economizer heat exchanger also passes into the valve assembly 36, and is communicated to the line ~~142~~ 42—returning the refrigerant to the indoor heat exchanger 28. As is shown, ports associated with lines 33 and 40 are communicated by the position of a slider spool piston 42. Piston 42 is moved by control 44 within a valve body 45. As is also shown, a port associated with the line 35 communicates refrigerant to a port associated with the line ~~142~~ 42. An end face 51 of the spool piston 42 provides a restriction of the flow through the port ~~142~~ 42, as shown. As can be appreciated from this figure, the position of the piston 42 can be adjusted to achieve an exact desired size for the orifice or restriction between the end face 51 and the port ~~142~~ 42. Now, a designer of the refrigerant cycle 20 can ensure that this restriction is as desired for the cooling mode such as by the relative position of the port ~~142~~ 42 and end face 51. The restriction between the end face 51 and the port ~~142~~ 42 provides the main expansion device in this manner.

Please replace paragraph [14] with the following paragraph:

The refrigerant system may also operate in a non-economizer mode. In non-economizer mode, the economizer expansion device 32 is closed. Refrigerant is no longer tapped from the line 37 into the economizer heat exchanger 34. However, when an economizer cycle is desired, valve 32 is opened, and the tapped refrigerant flows from tap 37 through the economizer heat exchanger 34. This tapped refrigerant is cooled after having passed through the economizer expansion device 32. It thus cools the refrigerant flowing in the main flow line through the economizer heat exchanger and the line 35. The details and reasons for providing an economizer cycle are as known, and form no portion of this invention. However, the present invention does provide two functions with a single valve assembly by combining the valve for shifting between heating and cooling modes and routing the refrigerant to the economizer heat exchanger and compressor suction port, and further providing the main expansion valve function. The tapped refrigerant from the line 37, after having passed through the economizer heat exchanger 34 is returned through a line 38 to an intermediate compression point in the compressor 22.

Please replace paragraph [15] with the following paragraph:

Figure 3 shows the refrigerant cycle 2022, however now in a heating mode. The refrigerant from the compressor 22 passes to the indoor heat exchanger 28, and eventually to the outdoor heat exchanger 24. From the outdoor heat exchanger 24, the refrigerant passes through the valve 30, returning the refrigerant into the line 27, and back to the compressor 22. Again, the system may operate in heating mode without an economizer cycle. Under such conditions, valve 32 is maintained tightly closed. However, should an economizer cycle be desirable, then the

valve assembly 36 is opened to provide an expansion function. The valve assembly 36 is in the illustrated position. The refrigerant from the line 37 is now expanded by the valve device 32, and subcools the refrigerant in the economizer heat exchanger 34. The refrigerant is again returned through the line 38 back to the compressor 22. As can be appreciated, refrigerant is now routed from the line 42 leading from the indoor heat exchanger to the line 40. The refrigerant now passes the main refrigerant flow from the indoor heat exchanger, through the valve assembly 36, and into the economizer heat exchanger 34. As can also be appreciated, fluid flow from the line 35 is metered by an end 80 of the spool piston 42, and the port associated with the line 33. Again, by careful positioning of the spool piston 42 relative to the port 33, an exact desired metering orifice size can be achieved for the heat pump operation.

Please replace paragraph [16] with the following paragraph:

~~A eControl for the system 44 also~~, operates the valves ~~devices~~ 30, 32 and 36, dependent on whether the refrigerant system is in the heating or cooling mode, and whether economizer cycle operation is desired. A worker of ordinary skill in the art would recognize how to provide an appropriate control.